

CONFIDENTIAL

00/13/60

(FINAL DATA
on
Broadband Antenna and Filters
and Video Detector

The following is the final performance data on equipments involved in the subject program. The following abbreviations were used on the data sheets.

Frequency in mcs -- Frequency in megacycles per second.

TSS in dbm -- Tangential Sensitivity in decibels below 1 milliwatt.

P_D in $\mu\text{w}/\text{m}^2$ -- Power density in microwatts per square meter.

E.L. -- Equipment limit (limit of power available).

N.E. -- No equipment (no signal generators for this frequency range).

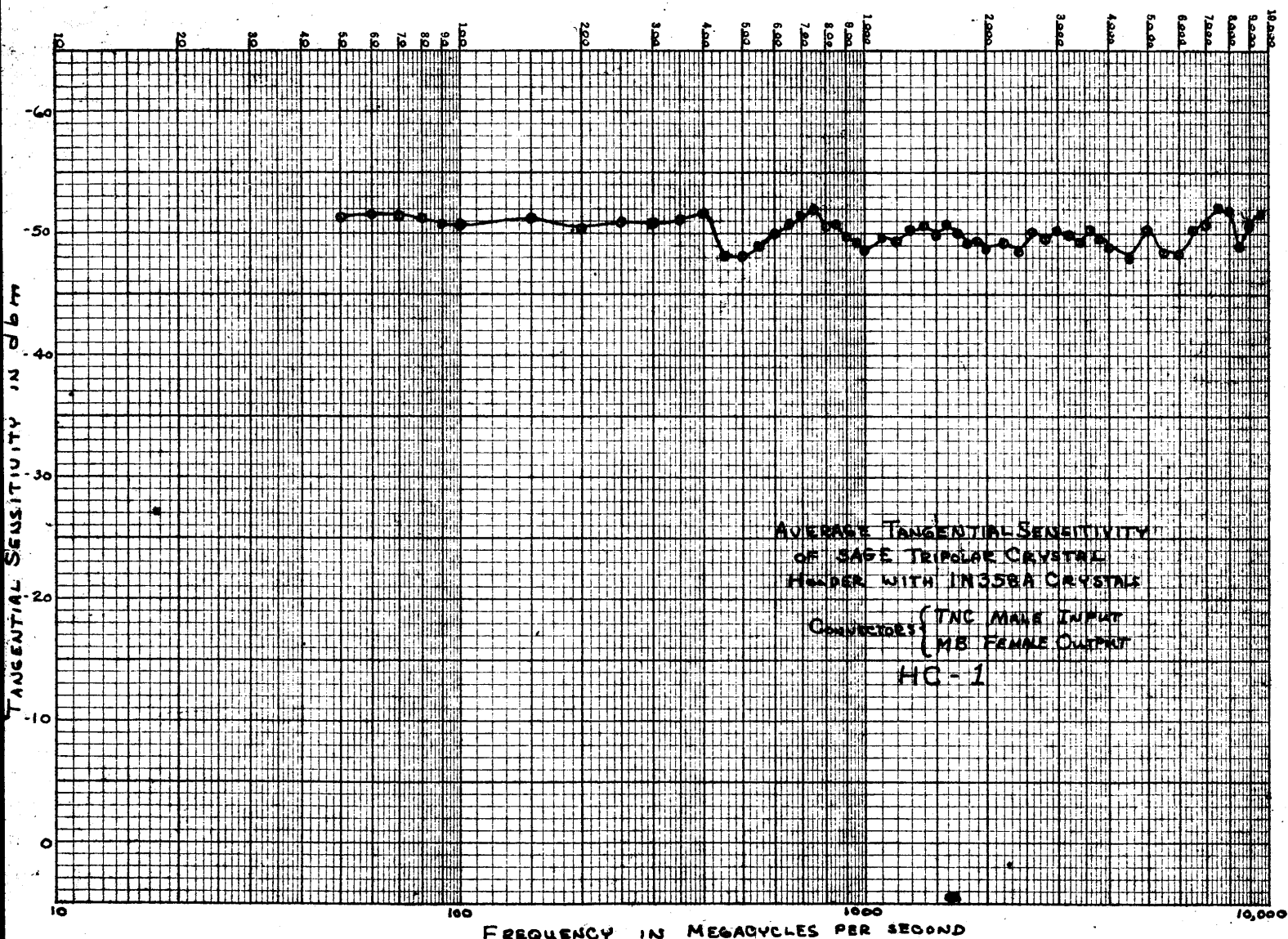
E.I. -- Equipment inoperative.

DOC <u>36</u>	REV DATE <u>30 APR 1960</u>	BY <u>018313</u>
ORIG COMP <u>33</u>	GPI <u>56</u>	TYPE <u>30</u>
ORIG CLASS <u>M</u>	PAGES <u>38</u>	REV CLASS <u>C</u>
JUST <u>22</u>	NEXT REV <u>2010</u>	AUTH: NR 78-2

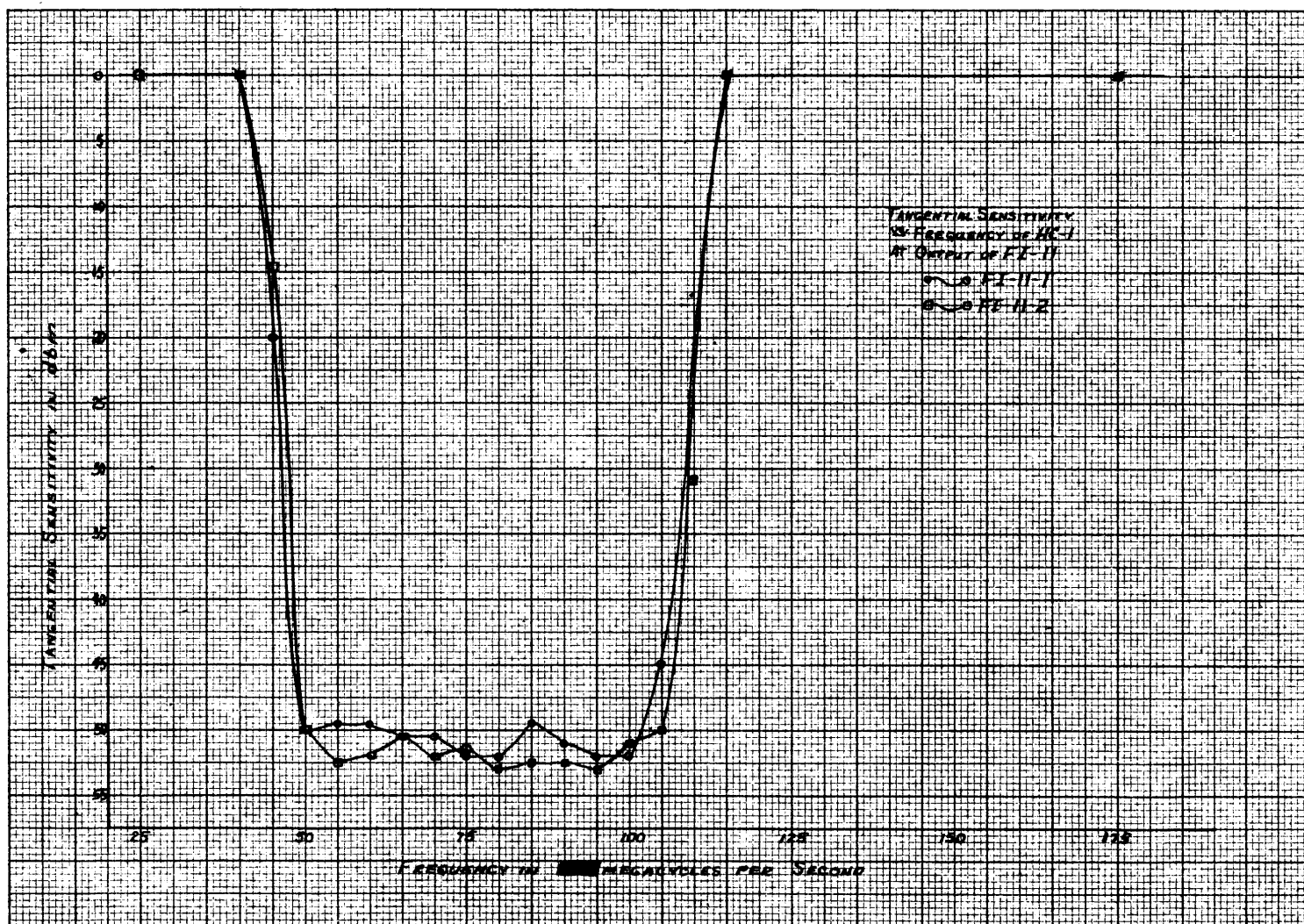
ORIGINAL CL BY 235979
☐ DECL ☐ REW CN 2010
 EXT BYND 6 YRS BY SAME
 REASON 3 & (3)

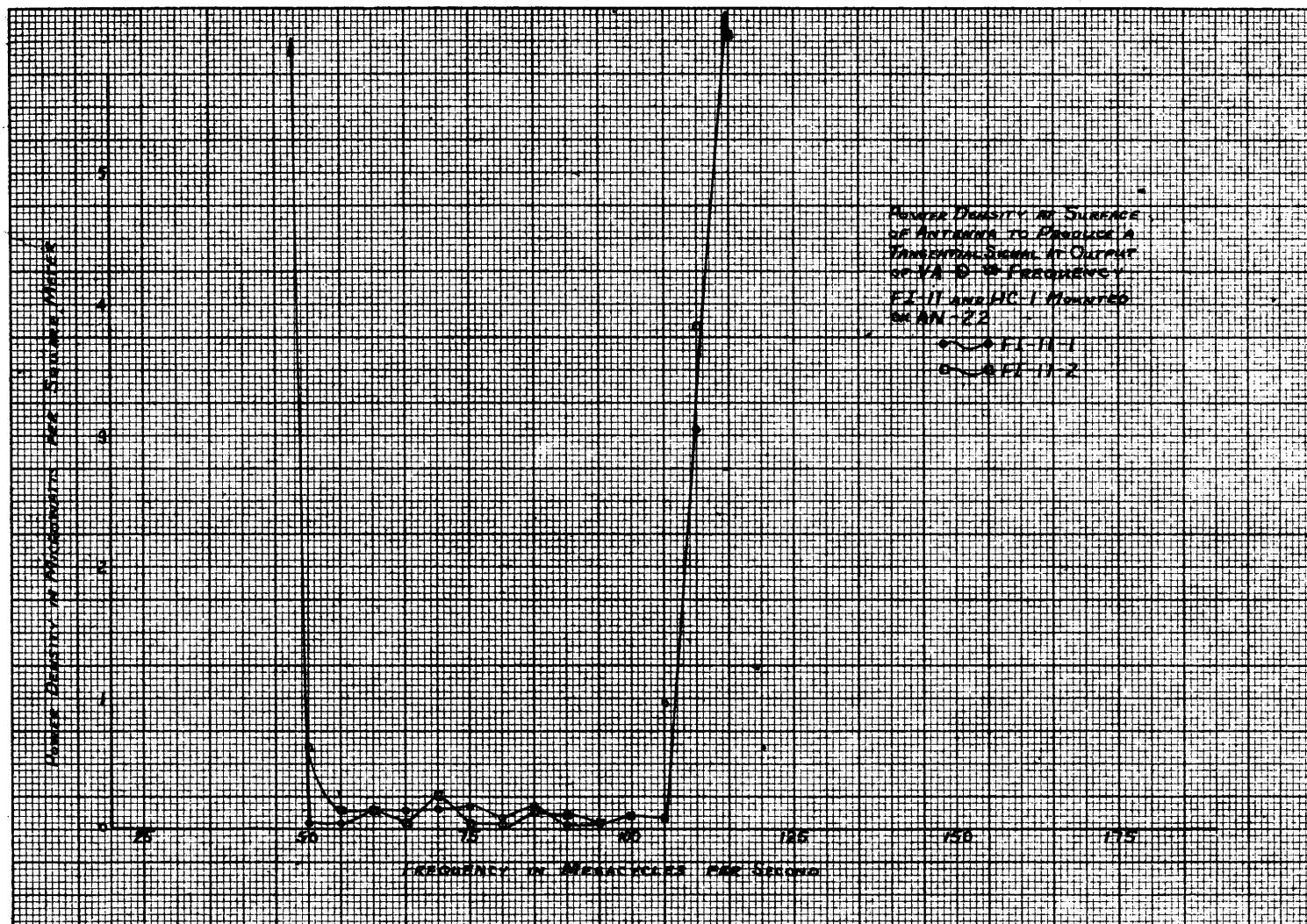
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KEUPPEL & ESSER CO. MADE IN U.S.A.
3 CYCLES X 70 DIVISIONS

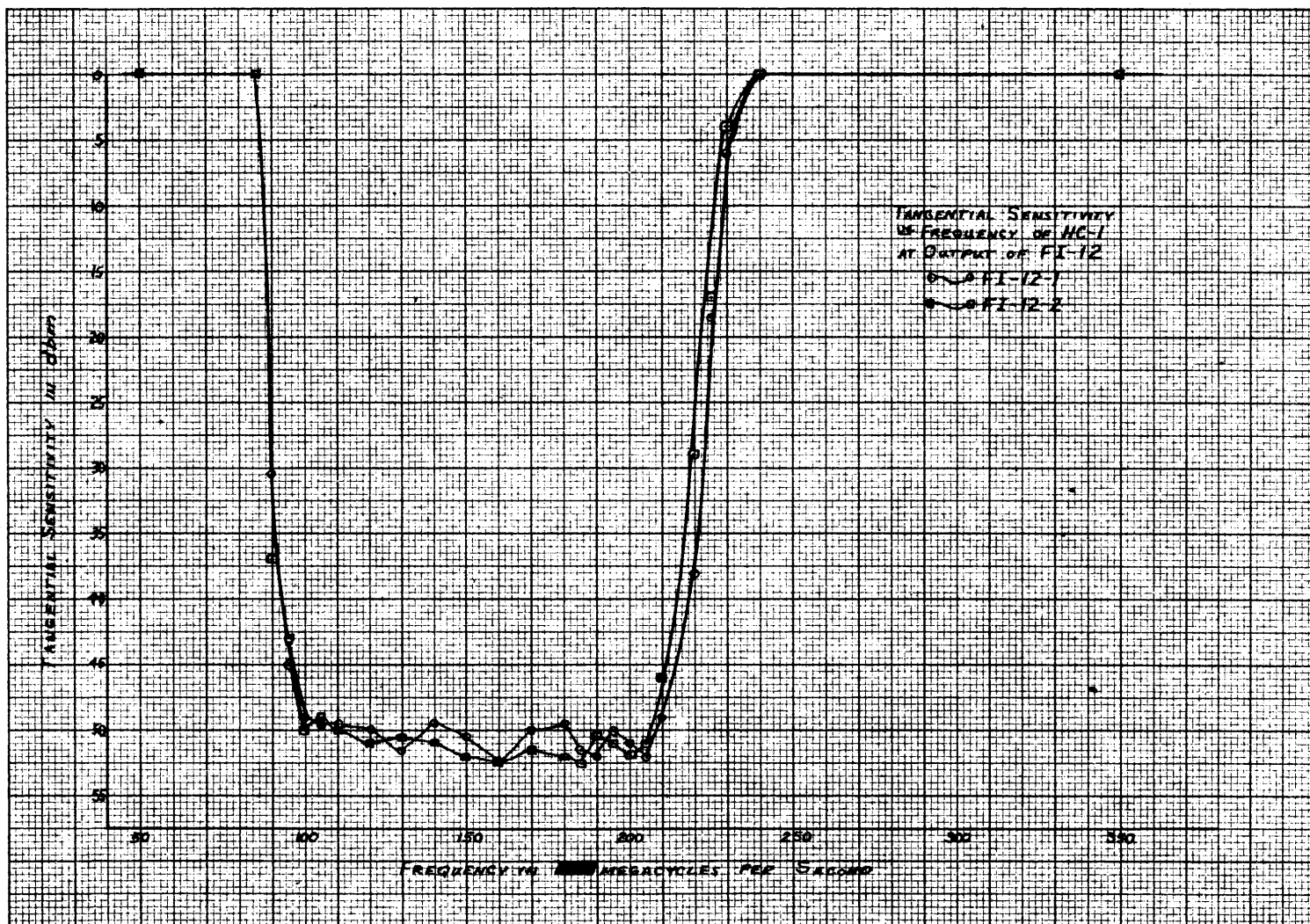


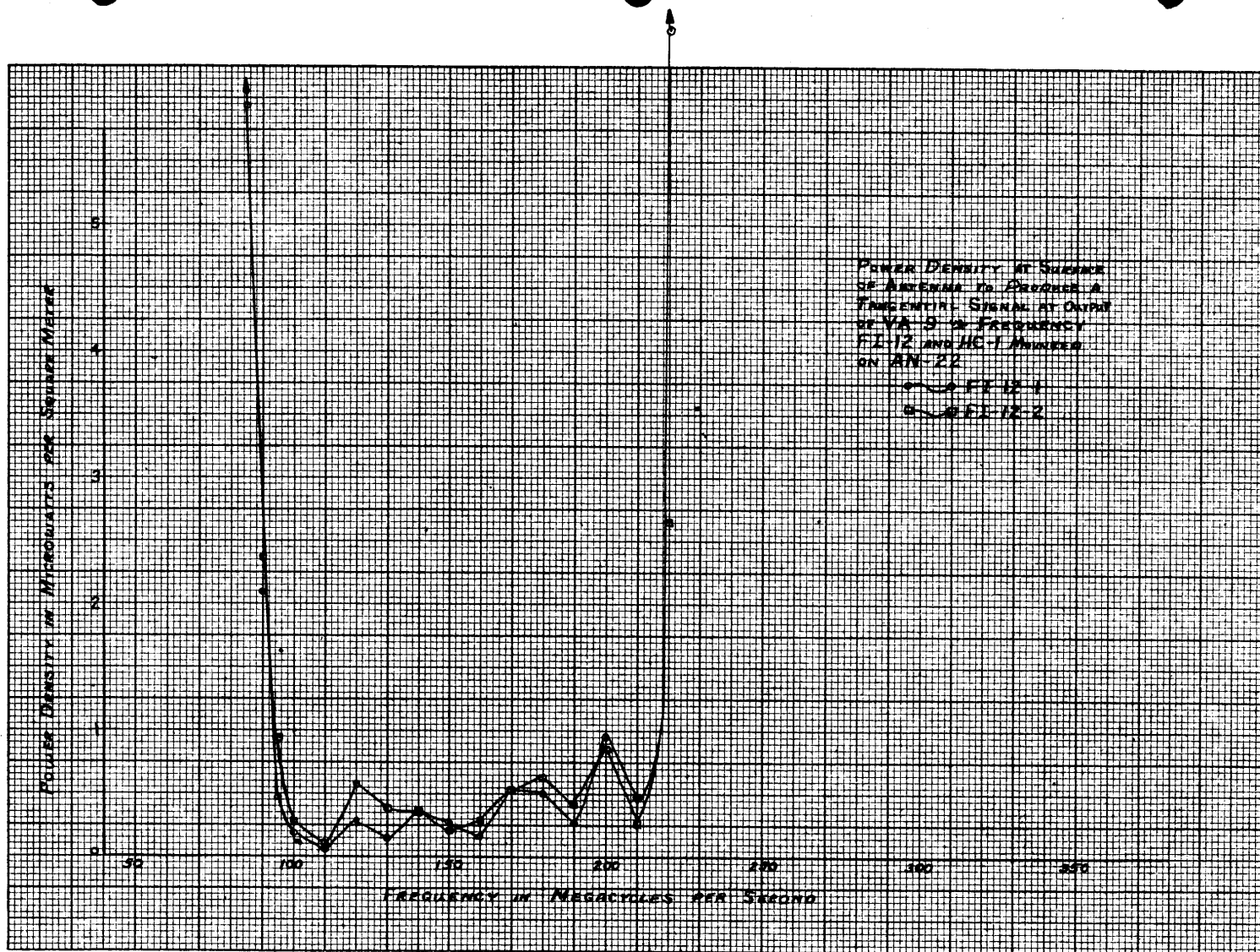
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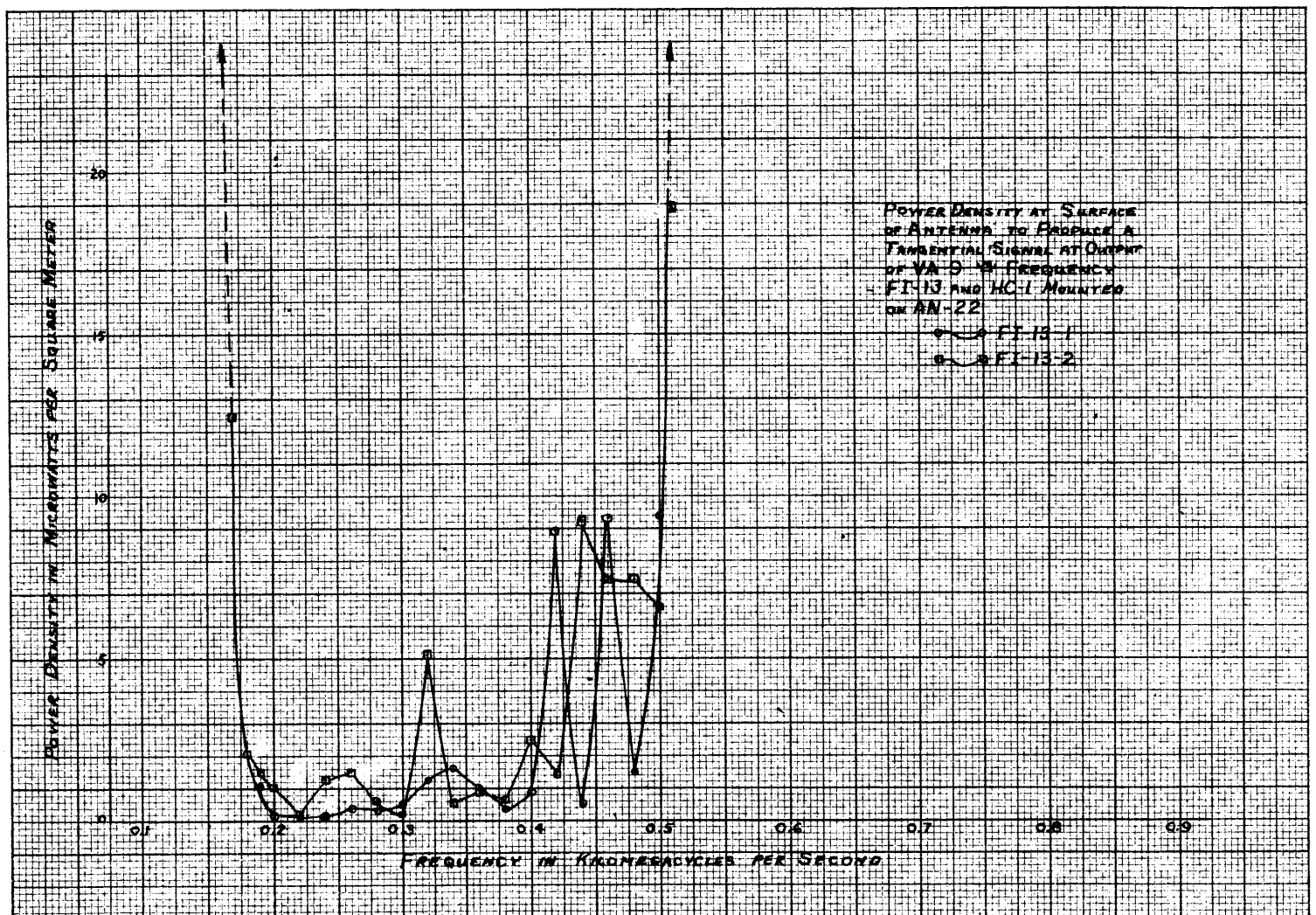


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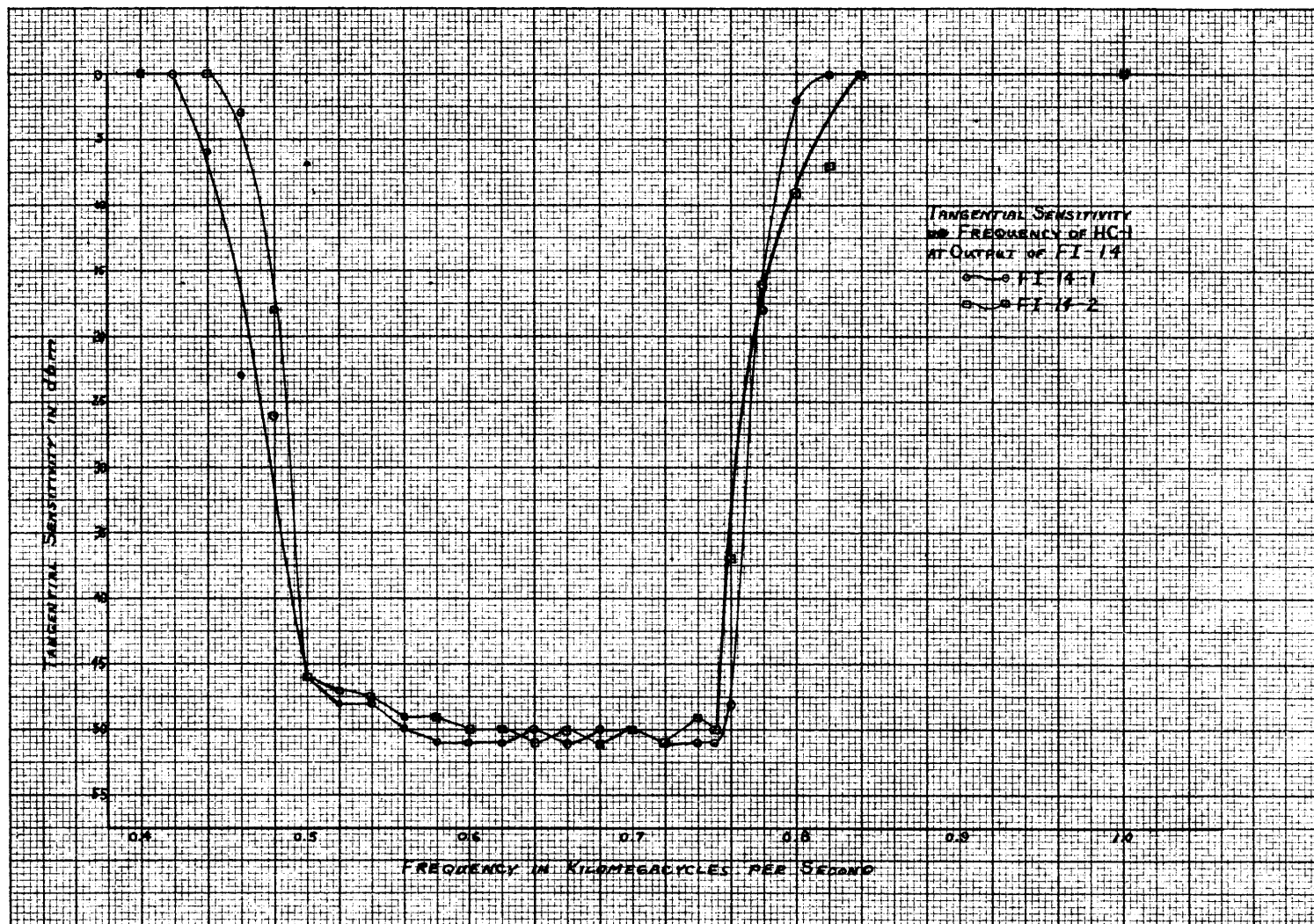


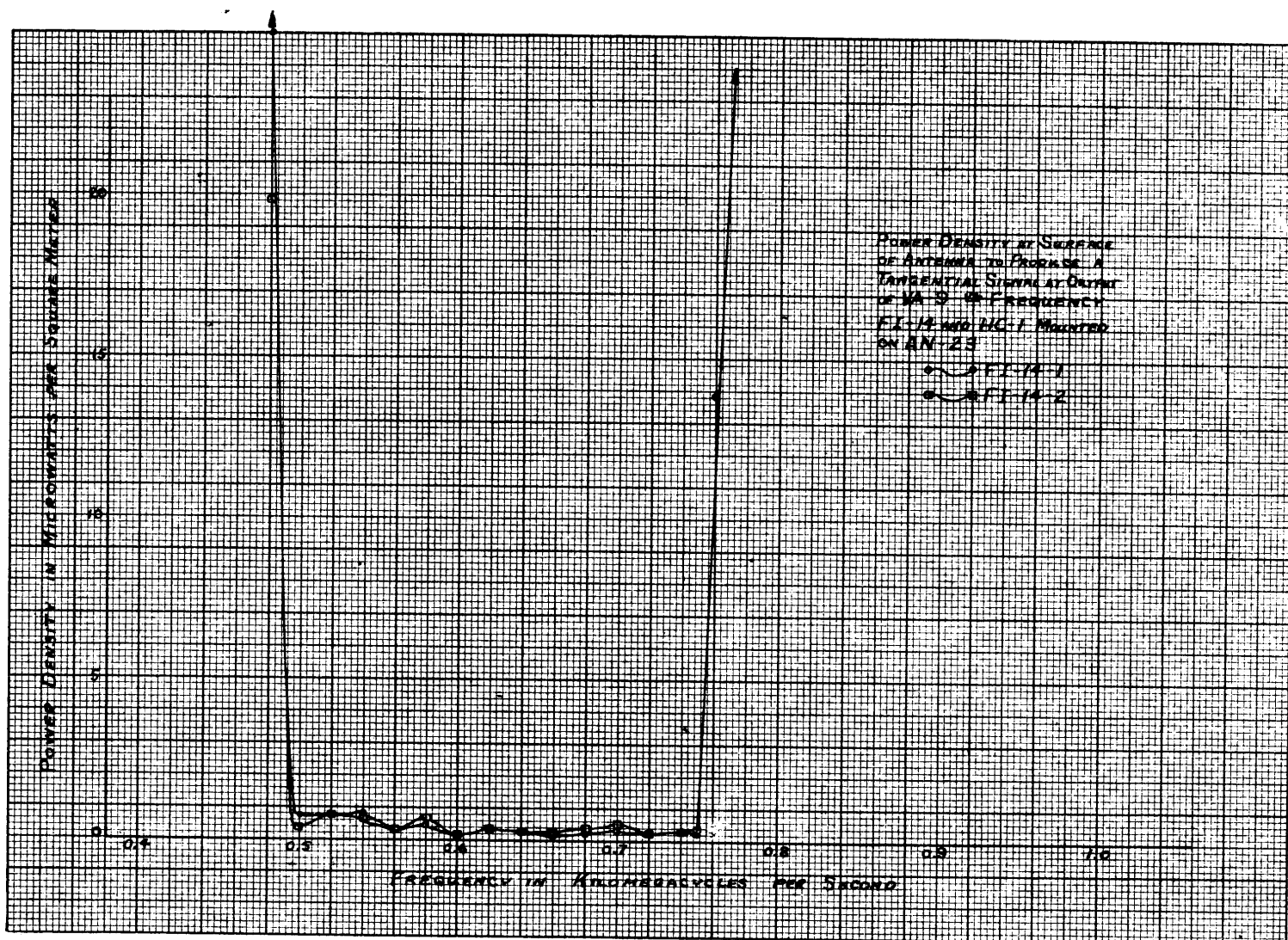


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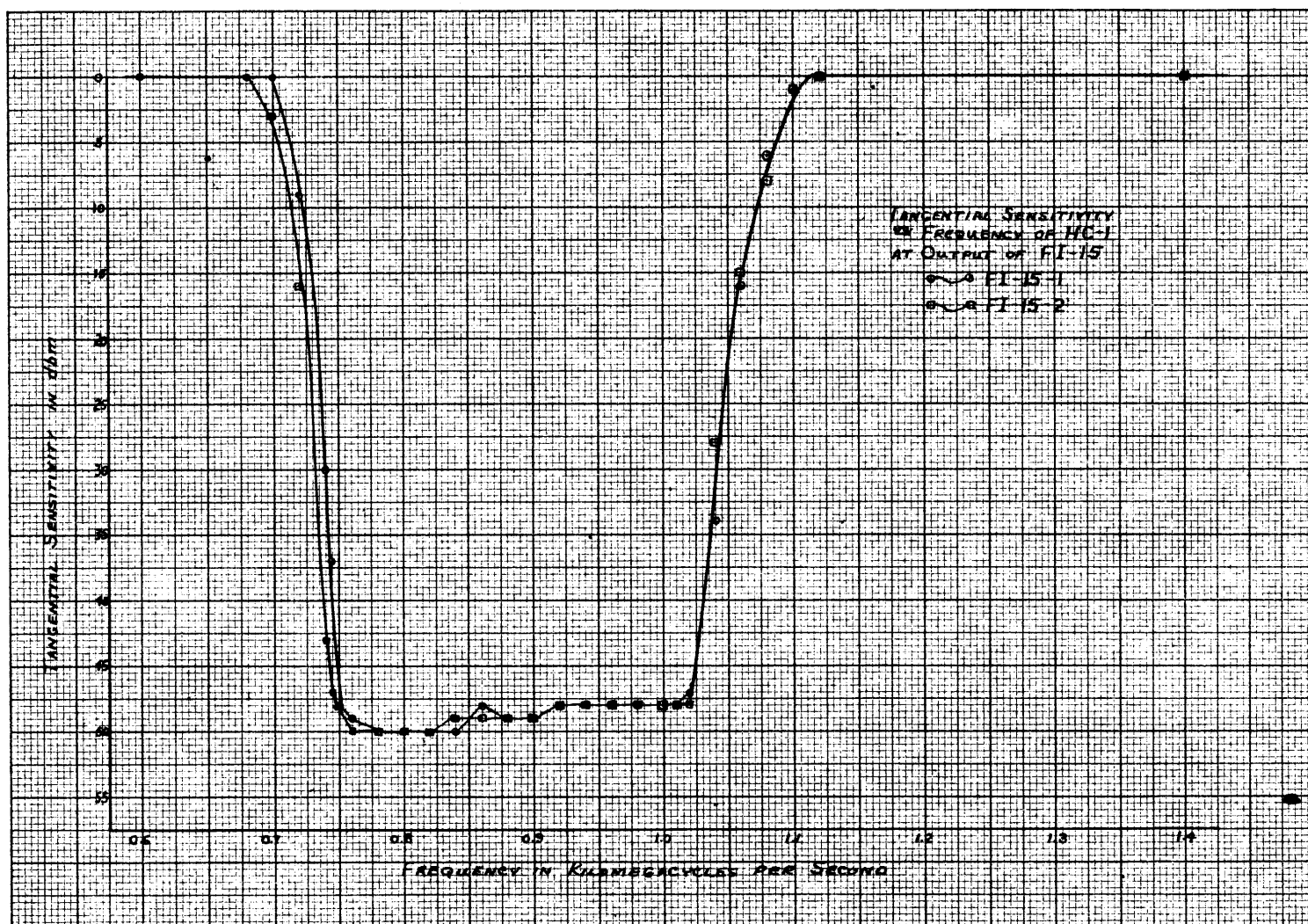


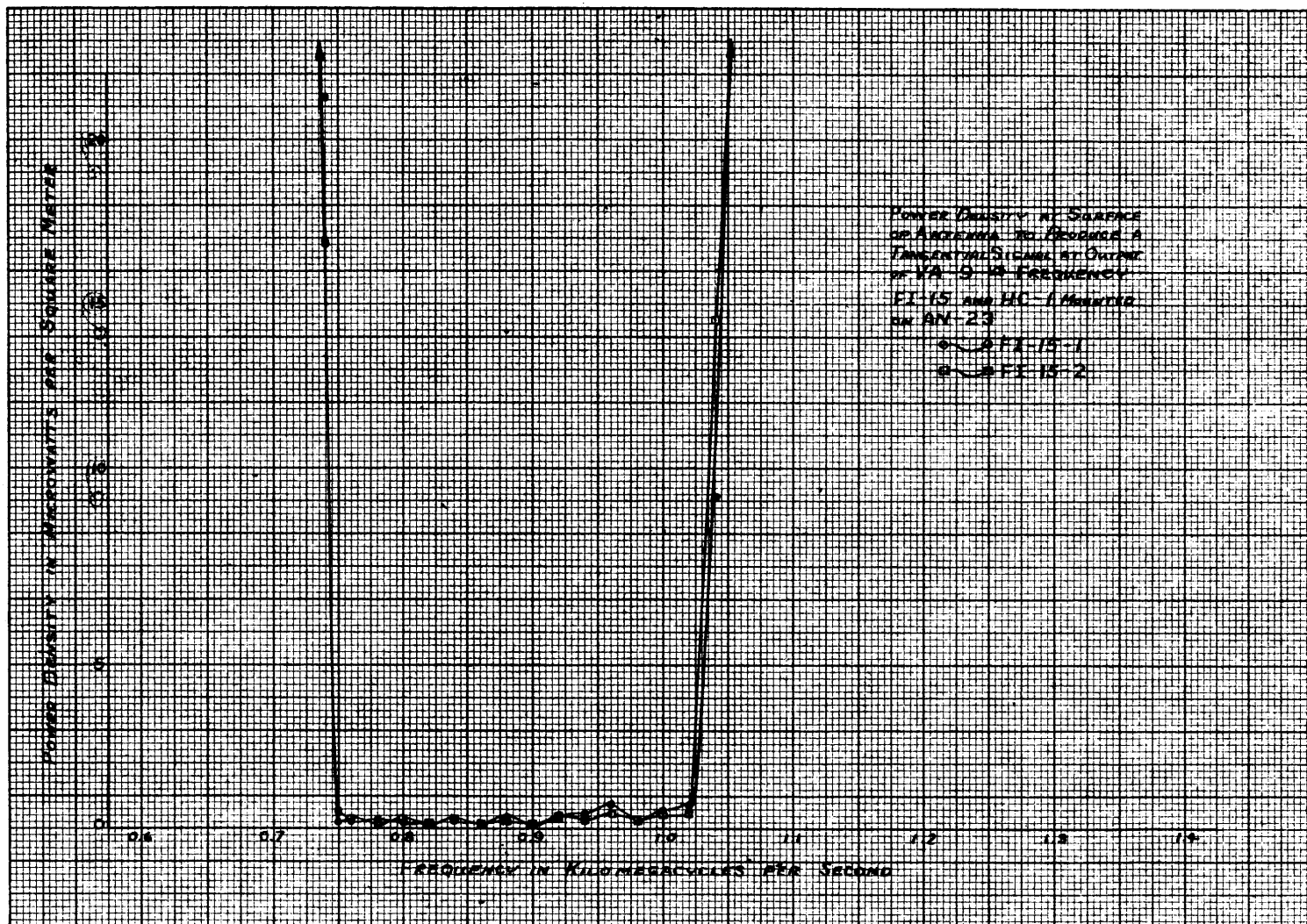
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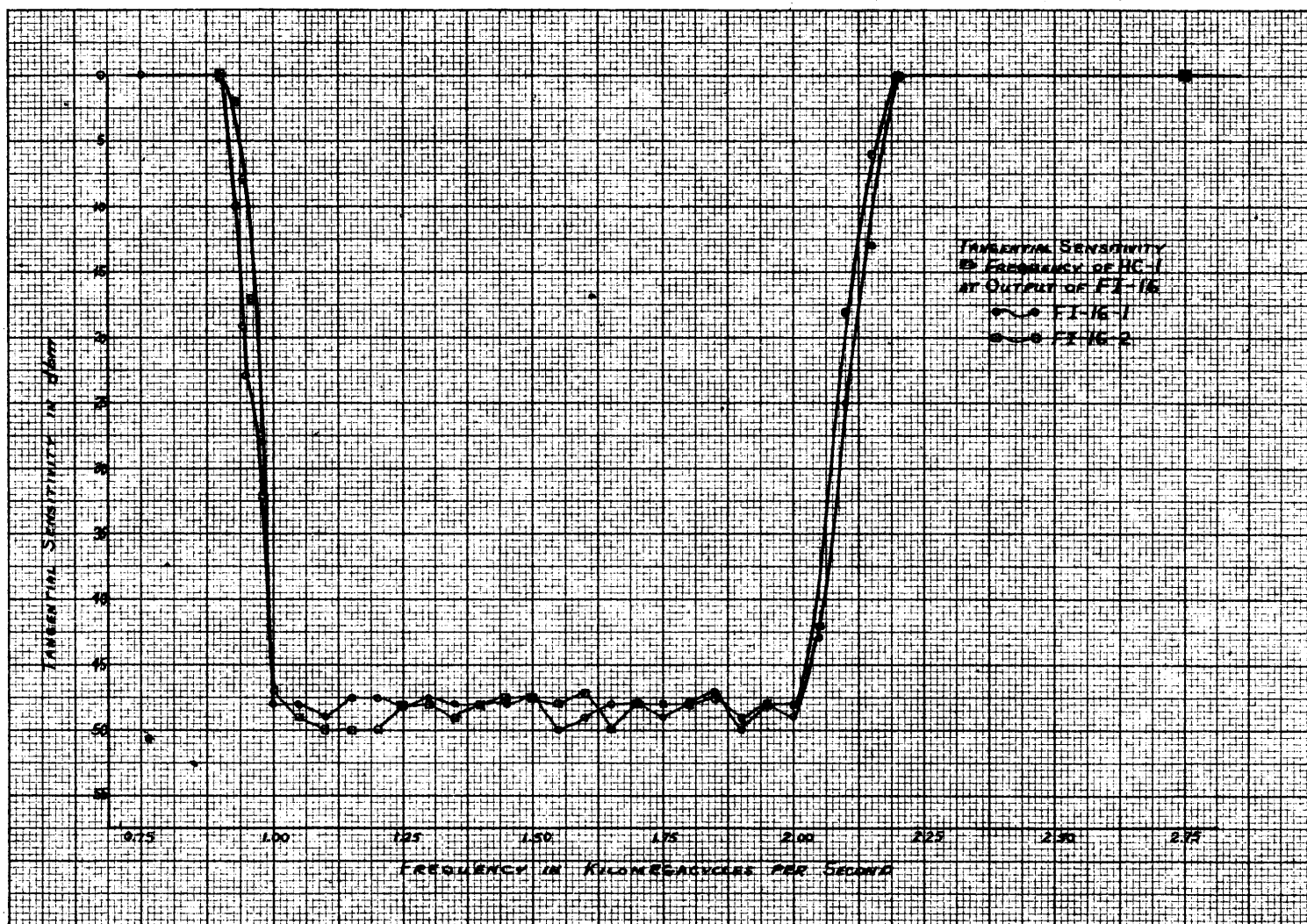


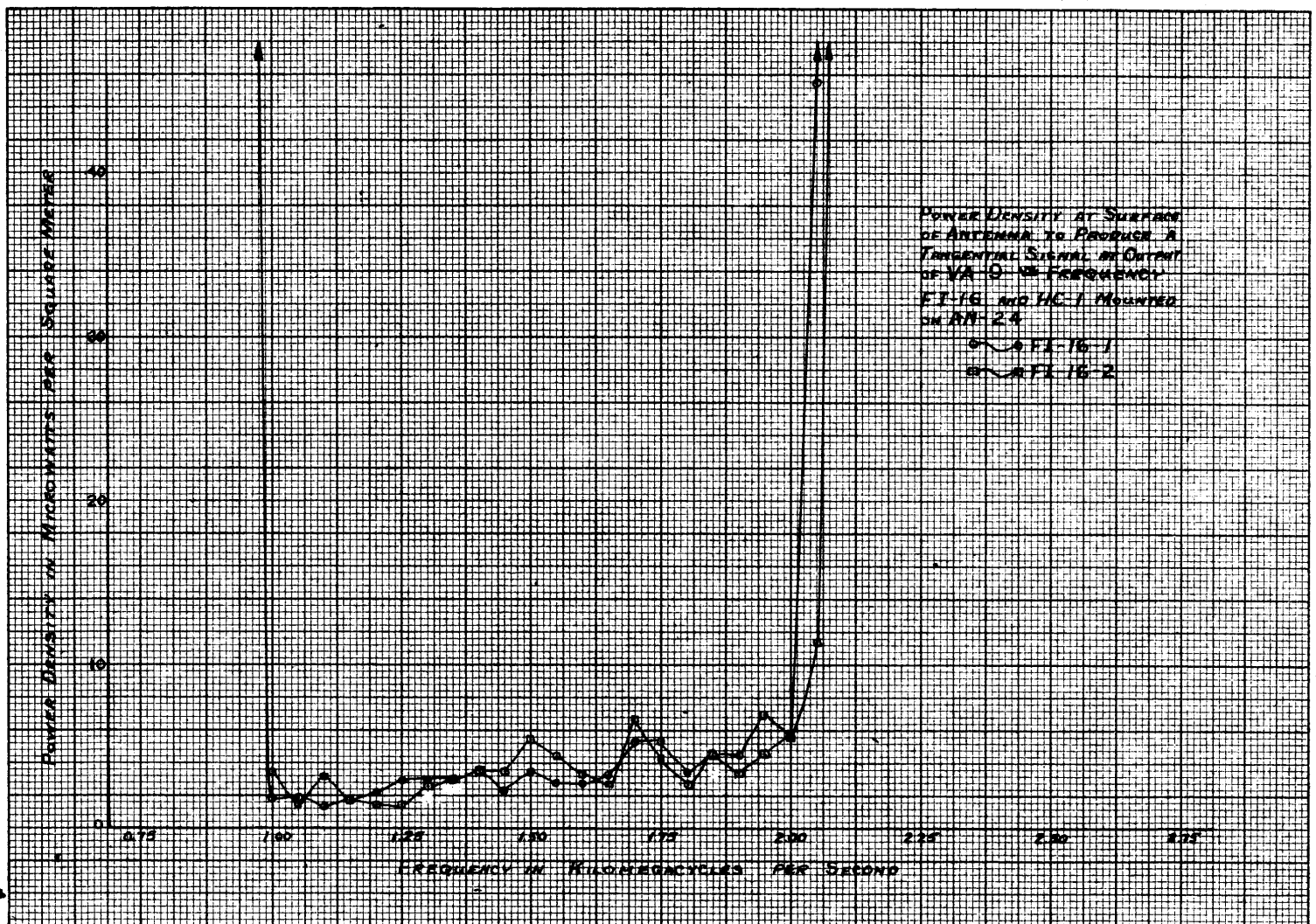
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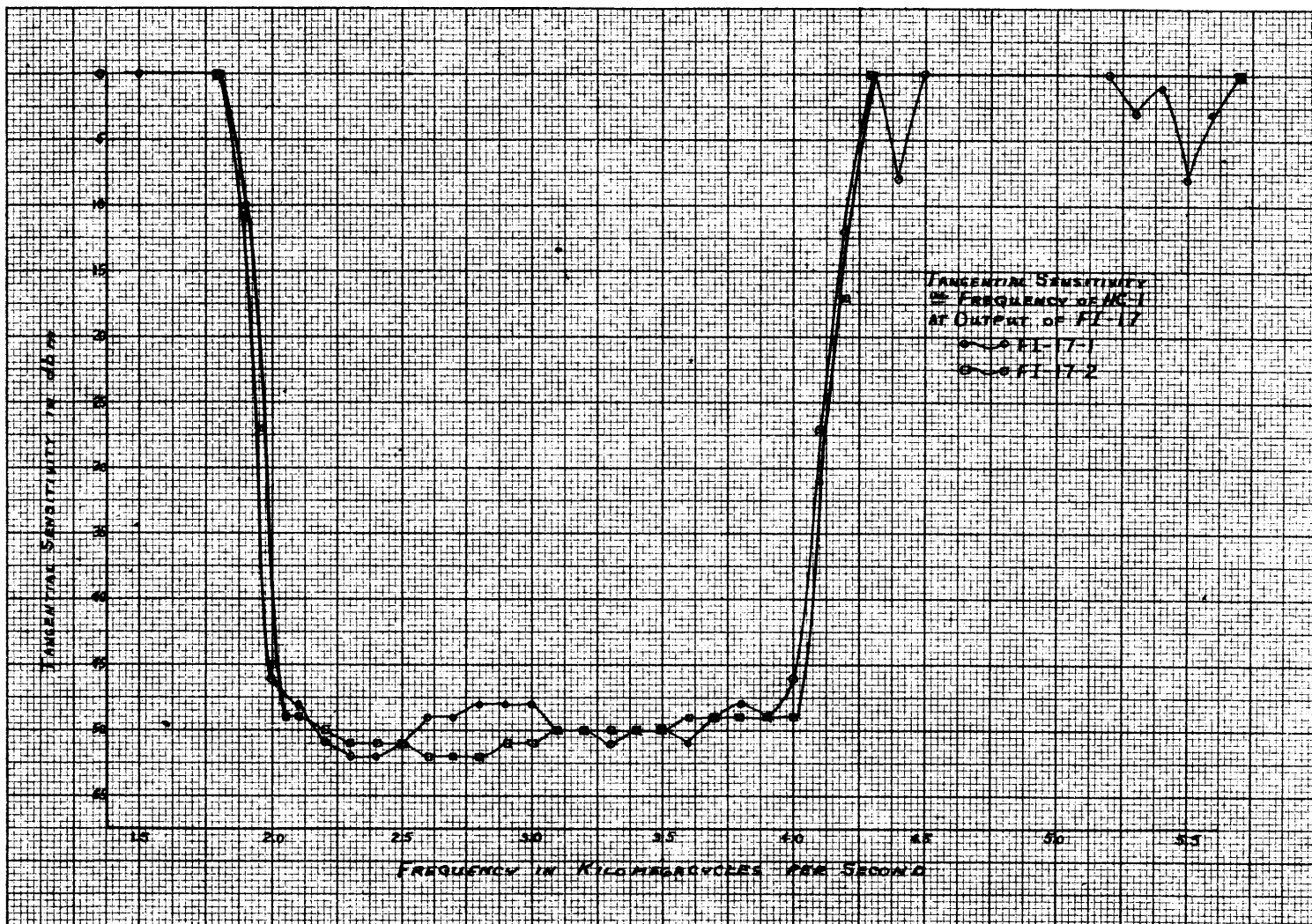


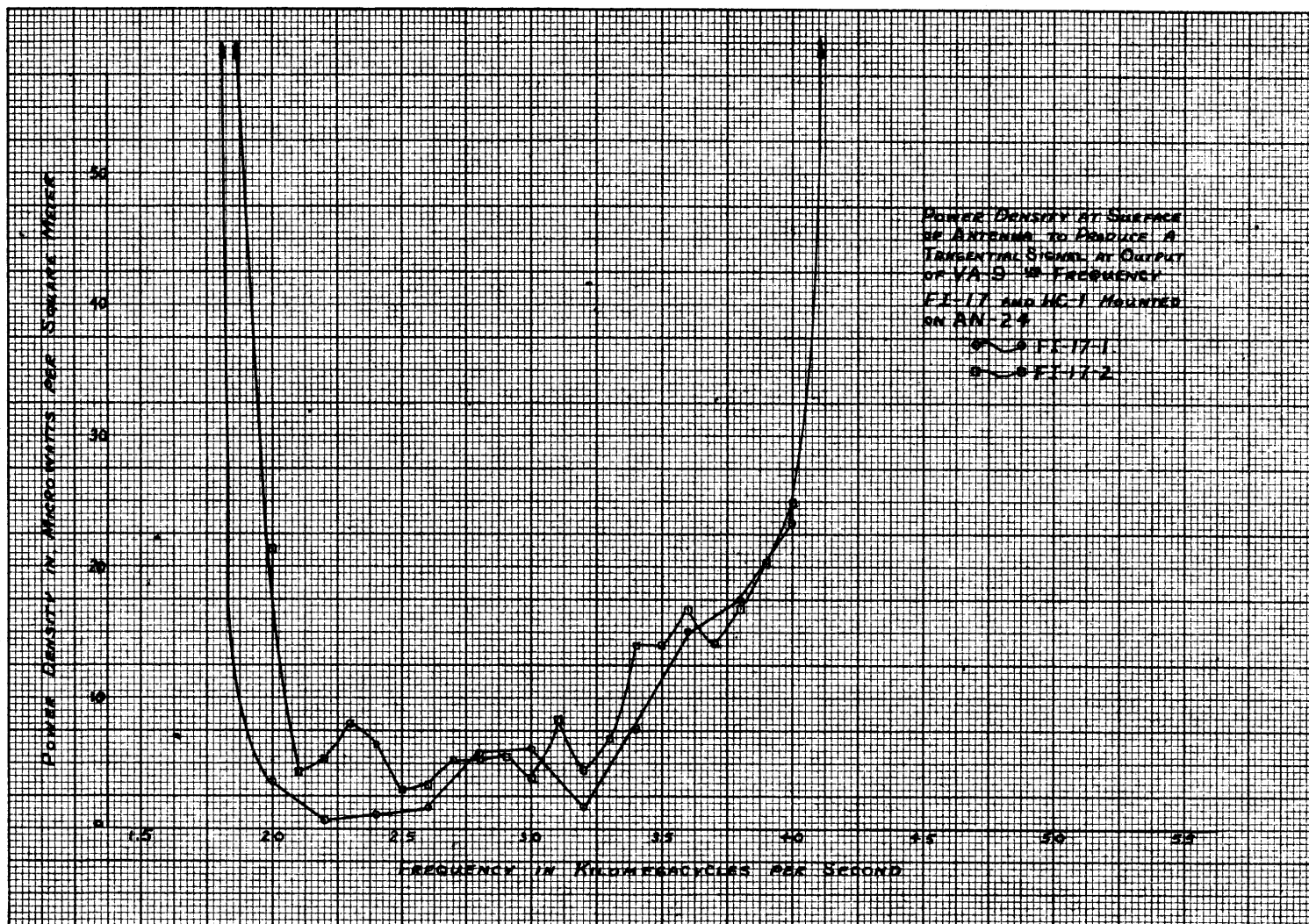
FREQUENCY IN Mc/s	FI-16-1 TSS in dbm	FI-16-2 TSS in dbm		FI-16-1 Po in $\mu W/m^2$	FI-16-2 Po in $\mu W/m^2$
880	< 0	< 0			
900	< 0	< 0			
920	10.0	2.0			
940	19.0	8.0			
960	23.0	17.0		— E. L. —	— E. L. —
980	28.0	32.0		> 155.0	> 155.0
1000	48.0	47.0		1.846	3.655
1050	48.0	49.0		1.946	2.434
1100	49.0	50.0		1.312	3.275
1150	47.5	50.0		1.729	1.729
1200	47.5	50.0		2.281	1.426
1250	48.0	48.0		2.916	1.831
1300	47.5	48.0		2.978	2.382
1350	48.0	49.0		2.943	2.943
1400	48.0	48.0		3.625	3.625
1450	48.0	47.5		2.263	3.530
1500	47.5	47.5		3.475	5.568
1550	50.0	48.0		2.736	4.334
1600	49.0	47.0		2.687	3.354
1650	48.0	50.0		3.335	2.672
1700	48.0	48.0		5.376	6.730
1750	49.0	48.0		5.408	4.283
1800	48.0	48.0		3.394	2.720
1850	47.0	47.5		4.334	4.334
1900	50.0	49.0		4.410	3.475
1950	48.0	48.0		7.005	4.431
2000	49.0	48.0		5.693	5.693
2050	43.0	42.0		45.54	11.44
2100	25.0	18.0		> 230.0	> 230.0
2150	13.0	6.0		— E. L. —	— E. L. —
2200	< 0	< 0			
2250	< 0	< 0			
2300	< 0	< 0			





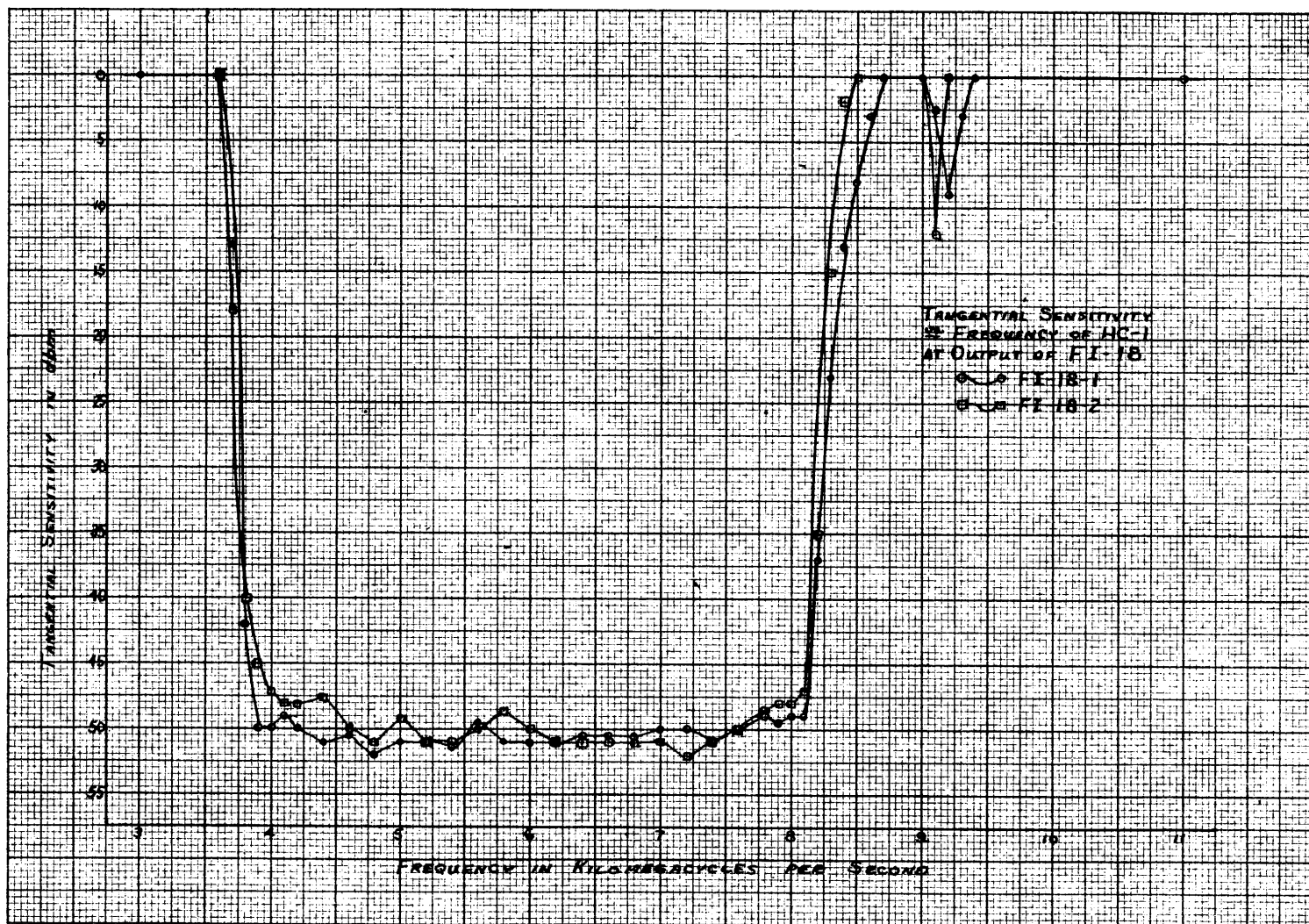
FREQUENCY IN KMc/s	FI-17-1 TSS IN dbm	FI-17-2 TSS IN dbm		FI-17-1 P_D IN MW/m^2	FI-17-2 P_D IN MW/m^2
1.7	< 0	< 0		— E.L. —	— E.L. —
1.8	< 0	< 0		> 175.7	
1.9	11.0	10.0			> 209.0
2.0	46.0	45.0		3.551	21.35
2.1	48.0	49.0			4.263
2.2	51.0	50.0		0.621	5.355
2.3	52.0	51.0			8.053
2.4	52.0	51.0		1.027	6.427
2.5	51.0	51.0			3.000
2.6	49.0	52.0		1.572	3.351
2.7	49.0	62.0			5.222
2.8	48.0	52.0		5.759	5.225
2.9	48.0	51.0			5.500
3.0	48.0	51.0		6.168	3.953
3.1	50.0	50.0			8.394
3.2	50.0	50.0		1.581	4.495
3.3	51.0	50.0			6.988
3.4	50.0	50.0		7.598	14.05
3.5	50.0	50.0			14.09
3.6	51.0	49.0		15.14	16.87
3.7	49.0	49.0			14.17
3.8	48.0	49.0		17.52	16.95
3.9	49.0	49.0			20.23
4.0	46.0	49.0		23.36	24.96
4.1	31.0	27.0			> 200.0
4.2	12.0	17.0		> 350.8	
4.3	< 0	< 0		— E.L. —	— E.L. —
4.4	8.0	< 0			
4.5	< 0	< 0			
4.6	< 0	< 0			
4.7	< 0	< 0			

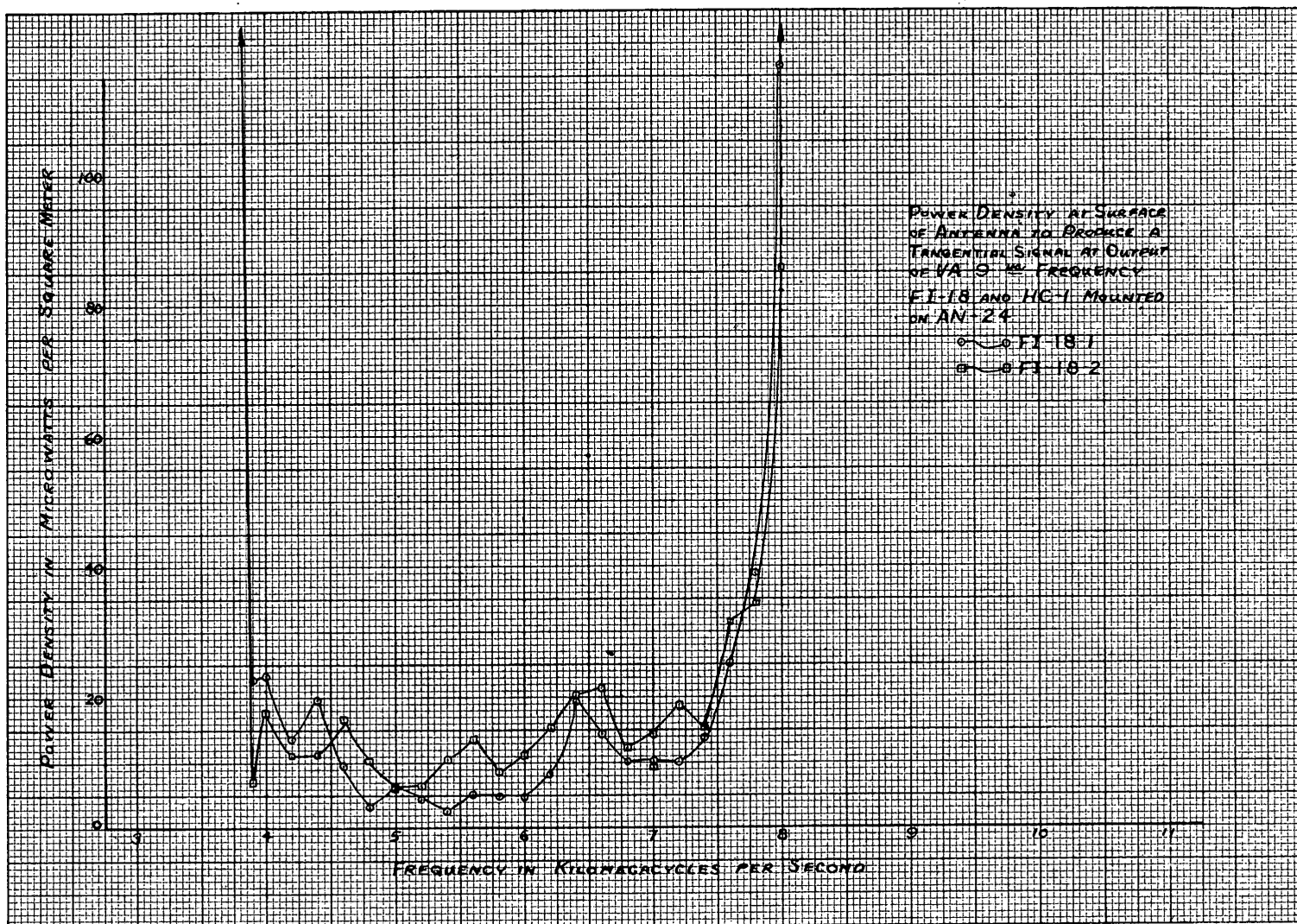




FREQUENCY IN KMCS	FI-18-1 TSS in dbm	FI-18-2 TSS in dbm		FI-18-1 P _D in Mw/m ²	FI-18-2 P _D in Mw/m ²
3.5	< 0	< 0			
3.6	< 0	< 0			
3.7	13.0	18.0		— E.L. —	— E.L. —
3.8	42.0	40.0		> 387.0	> 387.0
3.9	50.0	45.0		22.82	7.111
4.0	50.0	47.0		23.30	17.77
4.1	49.0	48.0			
4.2	50.0	48.0		13.80	11.28
4.4	51.0	47.5		19.80	11.02
4.6	50.5	50.0		9.55	16.76
4.8	52.0	51.0		3.06	10.29
5.0	51.0	49.0		6.25	6.270
5.2	51.0	51.0		4.45	6.485
5.4	51.5	51.0		2.62	10.39
5.6	49.5	50.0		5.15	13.66
5.8	51.0	48.5		4.83	8.628
6.0	51.0	50.0		4.70	11.27
6.2	51.0	51.0		8.18	15.18
6.4	50.5	51.0		19.25	20.17
6.6	50.5	51.0		14.55	21.46
6.8	50.5	51.0		10.20	17.29
7.0	50.0	51.0		10.38	14.62
7.2	50.0	52.0		10.15	18.76
7.4	51.0	51.0		13.85	15.47
7.6	50.0	50.0		25.30	31.64
7.8	49.0	48.5		38.70	34.29
7.9	49.5	48.0			
8.0	49.0	48.0		116.4	85.83
8.1	49.0	46.0		202.0	265.2
8.2	37.0	35.0		> 297.0	
8.3	23.0	15.0		— E.L. —	— E.L. —
8.4	13.0	2.0			

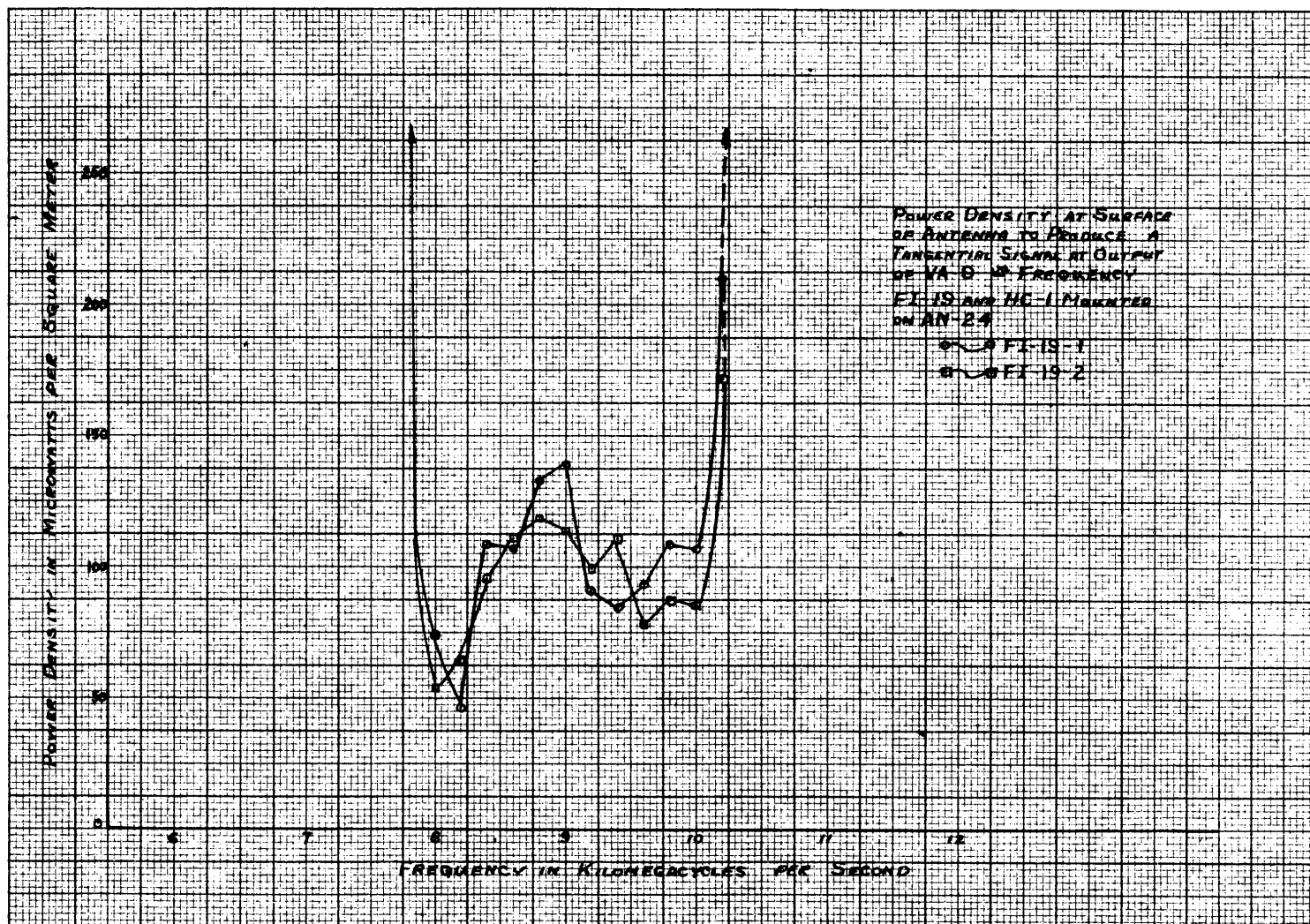
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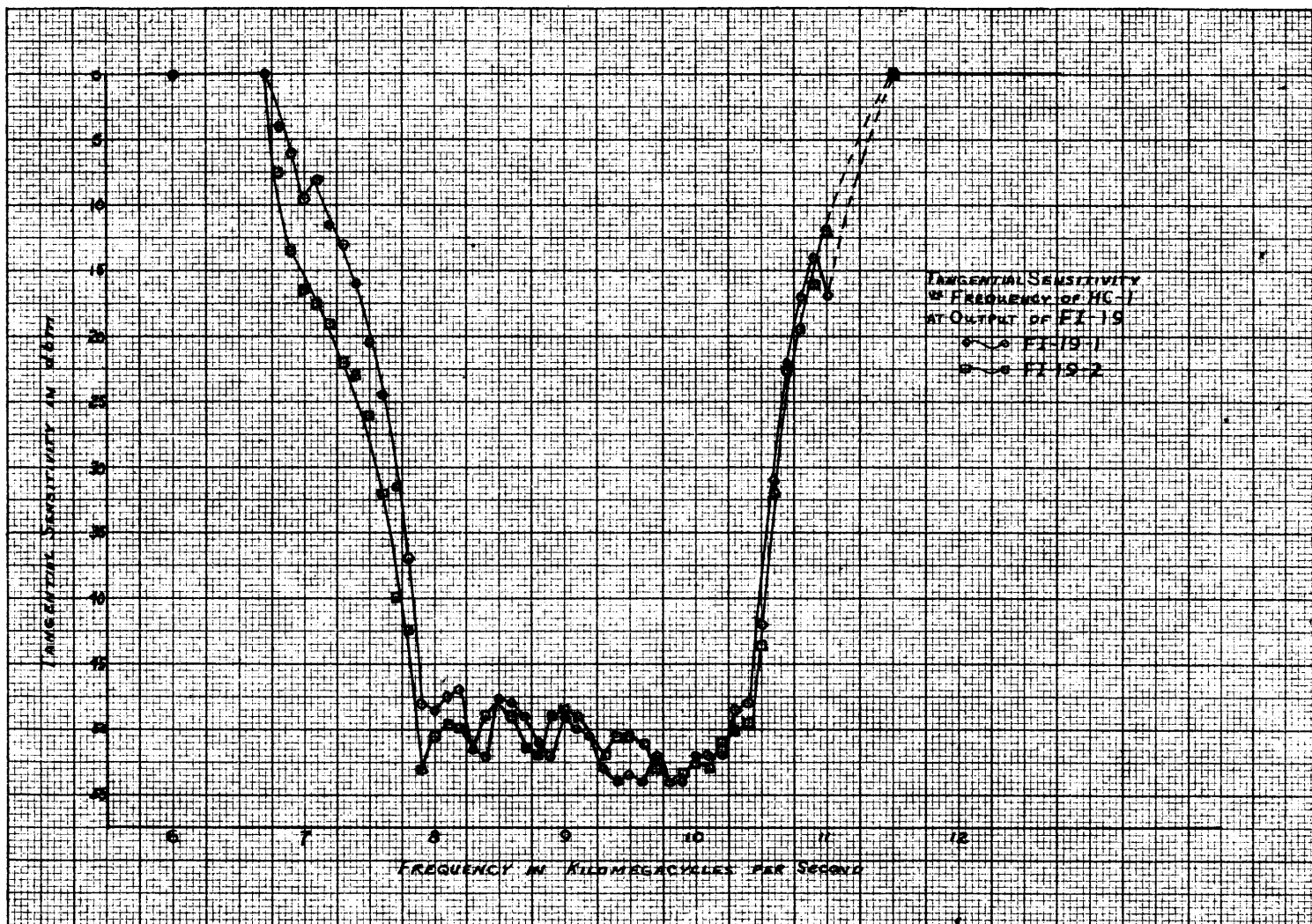




FREQUENCY IN KMCS	FI-19-1 TSS IN dbm	FI-19-2 TSS IN dbm		FI-19-1 P_p IN MW/m ²	FI-19-2 P_p IN MW/m ²
6.6	< 0	< 0			
6.7	< 0	< 0			
6.8	4.0	7.5			
6.9	6.0	13.5			
7.0	9.5	16.5			
7.1	8.0	17.5			
7.2	11.5	19.0			
7.3	13.0	22.0			
7.4	16.0	23.0			
7.5	20.5	26.0			
7.6	24.5	32.0			
7.7	31.5	40.0		— E. L. —	— E. L. —
7.8	37.0	42.5		> 387.0	> 387.0
7.9	48.0	53.0			
8.0	48.5	50.5		73.80	53.21
8.1	47.5	49.5			
8.2	47.0	50.0		46.90	64.50
8.3	51.5	51.5			
8.4	52.0	49.0		108.0	96.04
8.5	47.5	47.5			
8.6	48.0	49.0		107.0	111.0
8.7	49.0	51.5			
8.8	51.0	52.0		132.8	118.3
8.9	52.0	49.0			
9.0	49.0	48.0		139.3	113.5
9.1	50.0	48.5			
9.2	50.5	50.5		91.0	99.54
9.3	53.0	52.0			
9.4	54.0	50.5		84.9	110.4
9.5	53.5	50.5			
9.6	54.0	51.0		93.0	78.79
9.7	52.0	53.0			

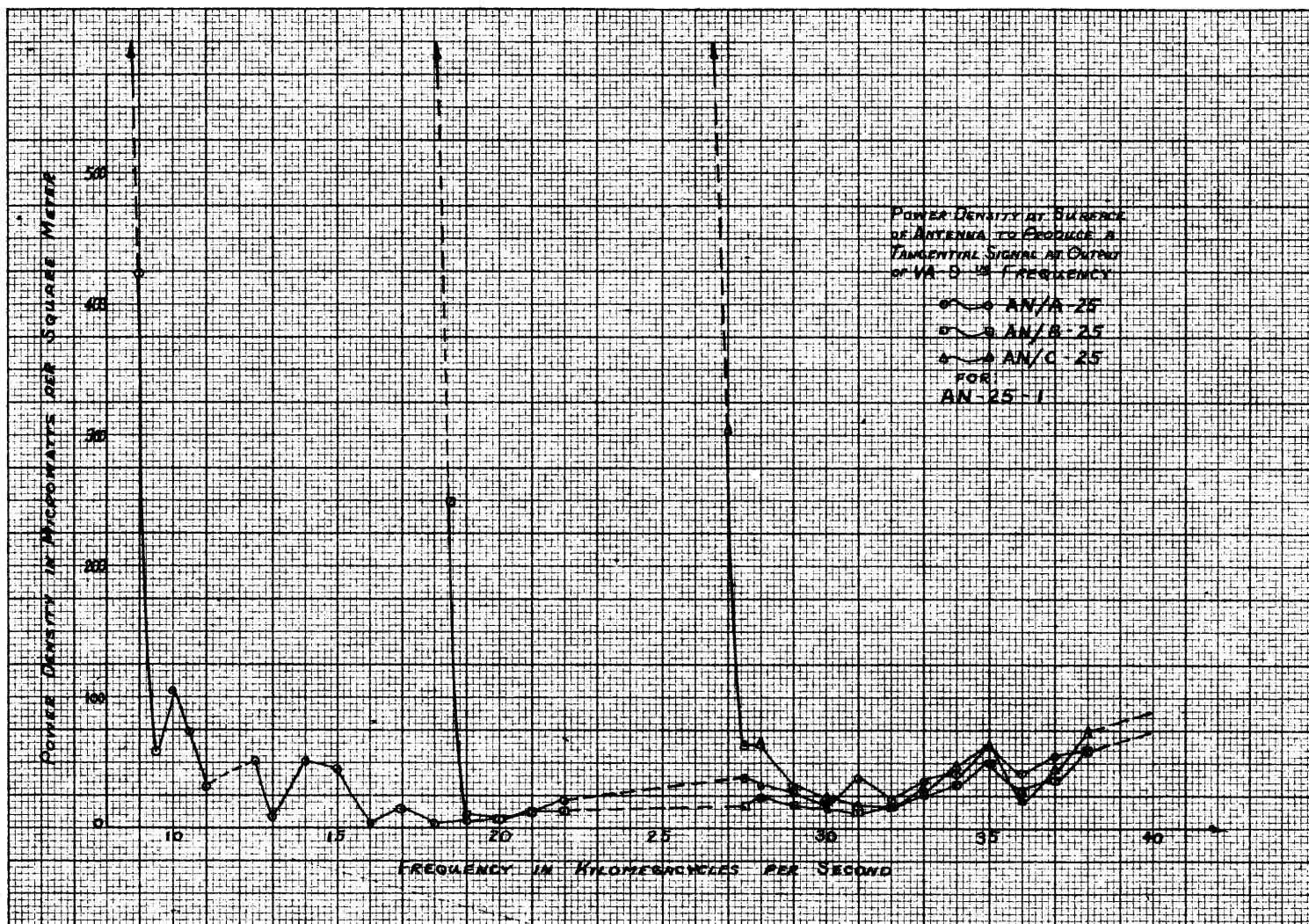
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For AN/25 - 1

FREQUENCY IN KMCs	AN/A-25 P_D IN $\mu W/m^2$ E.L.	AN/B-25 P_D IN $\mu W/m^2$	AN/C-25 P_D IN $\mu W/m^2$
9.0	424.2		
9.5	59.87		
10.0	105.1		
10.5	73.23		
11.0	31.77		
11.5	— N.E. —		
12.0	— N.E. —		
12.5	51.07		
13.0	8.76		
14.0	50.83		
15.0	45.57		
16.0	1.63		
17.0	14.77	— E.L. —	
18.0	2.35	> 1487.0	
19.0	5.30	10.35	
20.0	7.30	7.30	
21.0	12.50	12.50	
22.0	21.95	13.60	
23.0	— E.I. —	— E.I. —	
24.0			
25.0			
26.0			— E.L. —
27.0	— E.I. —	— E.I. —	305.0
27.5	39.72	17.65	62.79
28.0	32.41	23.06	65.04
29.0	27.78	17.45	31.11
30.0	18.67	16.76	23.78
31.0	39.49	11.21	15.82
32.0	21.17	16.86	16.86
33.0	35.77	25.18	28.61
34.0	42.47	33.67	47.32
35.0	63.46	50.00	63.46
36.0	42.35	29.82	21.18
37.0	55.68	35.69	44.61
38.0	58.84	58.84	74.40
39.0	— E.L. —	— E.L. —	— E.L. —



For AN-25-2

FREQUENCY K MGS	AN/A-25 Pd IN 4W/m ²	AN/B-25 Pd IN 4W/m ²	AN/C-25 Pd IN 4W/m ²
9.0	424.2		
9.5	95.5		
10.0	105.1		
10.5	58.40		
11.0	25.16		
11.5	— N.E. —		
12.0	— N.E. —		
12.5	51.07		
13.0	10.95		
14.0	28.46		
15.0	28.77		
16.0	2.08		
17.0	14.77	E.L.	
18.0	3.72	> 1487.0	
19.0	5.30	13.00	
20.0	7.30	7.30	
21.0	19.99	2.00	
22.0	5.49	2.19	
23.0	— E.I. —	— E.I. —	
24.0			
25.0			
26.0			— E.L. —
27.0	— E.I. —	— E.I. —	305.0
27.5	25.08	15.75	44.53
28.0	32.41	18.28	51.94
29.0	44.00	22.22	44.00
30.0	59.45	29.72	47.08
31.0	39.49	28.10	50.12
32.0	37.76	29.93	23.73
33.0	44.64	22.46	22.46
34.0	42.47	42.32	33.67
35.0	63.46	35.57	50.00
36.0	37.6	29.82	21.8
37.0	55.68	35.69	44.00
38.0	58.84	58.84	74.40
39.0	— E.L. —	— E.L. —	— E.L. —

